

ART. XV. *Die neuesten Entdeckungen, Erfahrungen und Ansichten in der Practischen Heilkunde, dargestellt und beurtheilt.* Von D. GEORG AUGUST RICHTER, Ordentlichem Lehrer der Medicin auf der Universität zu Königsberg. Erster Band. Zweite, sehr vermehrte und verbesserte Auflage. 8vo. Berlin, 1828.

*A Critical Exposition of the most recent Discoveries, Observations, and Experience in Practical Medicine.* By G. A. RICHTER, M. D. Professor in the University of Königsberg. Vol. I. Second edition, greatly improved and augmented.

AT no period in the history of our profession was a knowledge of the labours of contemporaneous physicians of so much importance to the medical practitioner, as it is in the age in which we live. The unremitting industry of an immense number of observers has, of late years, enriched almost every department of medical science with a mass of new facts; facts, which in many instances have tended materially to correct our views of the organization and functions of the animal economy, and of the diseases to which it is subject. Even if we are obliged to admit, that therapeutics has not a right to claim acquisitions as great and as numerous as those of which physiology and pathology so justly boast; yet it is certain that some real improvements have been effected in the treatment of disease, and that even these are sufficient to confer upon the physician of the present day, a decided superiority over the practitioner of the last age. The truth of this assertion is so obvious, that it is beginning to be duly appreciated. Formerly, the physicians of this country were usually satisfied with what they had learnt at college, or what they could acquire from the books which they had purchased during their years of study; and they experienced no material inconvenience from the course which they pursued; but the times have changed, and the great body of the profession are now thoroughly convinced of the importance of obtaining the latest and best information on every subject connected with their art. Experience has taught them, that if they neglect to do so, they will appear inferior to their younger competitors. If there are among us some individuals who are disposed to doubt, or perhaps even to oppose the idea of the superiority of modern science, they certainly constitute only a small minority, and we have no reason to suffer ourselves to be influenced by their arguments. History teaches, that there never was a time when new discoveries and new views had not to struggle with the opposition of those, who fancied that science had already reached its highest degree of excellence, but that in spite of their exertion, truth gained the victory, and the knowledge of man continued steadily to advance.

But if it is acknowledged that it is truly important to be conversant with the new facts which are daily promulgated, it must also be admitted that the acquisition of such knowledge is attended by great difficulties. He who is desirous to keep pace with the progress of his profession, has an arduous task to perform. The number of medical writings, and particularly of periodical works, has recently increased to an extent, which renders it almost impossible even for the industrious to peruse them all. The medical knowledge of former times may, perhaps, be acquired from systematic treatises, but few works of this character contain any considerable number of the observations peculiar to our own age. These we meet with dispersed over a vast mass of writings. Those who happen to reside in one of our principal cities, and enjoy the use of extensive libraries, may, perhaps, be able to study the most important of them; but the great body of our medical men, scattered over the country, and engaged in the exercise of an arduous profession, seldom have either leisure or opportunities for such a study.

When these circumstances are taken into consideration, we must all be sensible how largely we are indebted to him, who has presented to us, in a few volumes, a condensed and well-digested account of the principal observations and opinions which have been given to the medical world within the last twenty or thirty years; and such has been the object of Dr. Richter in the work, the title of which is placed at the head of this review.

Nobody could be better qualified for the execution of such a design than a German scholar. This is not the place to inquire into the necessity or expediency of the rigid examinations to which candidates for degrees are subjected in Germany, or into the propriety or utility of many other regulations belonging to the medical police of that country. Suffice it to say, that the system of instruction adopted in the German Universities, if it does not ensure better practitioners, is unquestionably calculated to form more learned men; and it is precisely learning which is chiefly requisite for the successful execution of a work like the present. It is a very difficult thing to determine the proper medium between study and observation. Both are essential, and neither should be neglected at the expense of the other. We are not disposed to deny, that it may perhaps be a fault of many German literati, that they attach almost exclusive importance to the former, and culpably neglect to attend to the latter; but at the same time, we are strongly apprehensive, that some of the neighbouring nations, and particularly the French, are guilty of an error of the

opposite kind. It may indeed be stated as a general fact, that if more discoveries are made in France and England than in Germany, it is nevertheless from German books that we can most easily derive a knowledge of these discoveries.

The work before us is offered to the public in the form of a supplement to a complete treatise on the practice of medicine, compiled by the author from the papers of his father, the late Dr. AUGUSTUS GOTTLIEB RICHTER. This celebrated man is known to the English public chiefly as a surgeon, through the medium principally of his *Elements of Surgery*, and his *Medico-Chirurgical Observations*. It may, therefore, not be known to many of our readers, that by the German nation, he is considered also one of their best physicians. Indeed, during the last eight years of his life, he no longer taught surgery, but confined himself in his lectures exclusively to the practice of physic. These lectures were always deemed peculiarly excellent, and were attended by an unusually numerous class of students, so that, as we are informed in the preface, there is scarcely a city in Germany, in which several of the principal physicians were not pupils of Richter. He did not, however, publish any work upon this subject, unless we consider as such a few detached essays in his *Medico-Chirurgical Observations*; but after his death, which took place in the year 1812, his son, Dr. George Augustus Richter, finding that the notes from which the above-mentioned lectures had been delivered contained ample materials for a systematic treatise, undertook the task of arranging them. Thus originated Richter's *Special Therapeutics*, published in eight large octavo volumes, and one volume of index. This work seems to have been very favourably received by the public, inasmuch as it has, notwithstanding its bulk, gone through three large editions since 1813, when the first volume was issued from the press. It certainly contains a very large mass of useful information on every thing connected with the treatment of diseases, and is probably not inferior, in practical utility, to any other similar production of its time. Yet we have no doubt, that there may have been a numerous class of medical men, who were not very well satisfied with many of the practical precepts inculcated in its pages. They might for example, complain that the doctrines upon which the practical deductions are founded are in many instances those of time gone by, and no longer suited to the present advanced state of science. Without altogether denying the justice of this remark, we are nevertheless willing to maintain, that with certain allowances, this treatise continues to be one of very great value, and we believe that there are very few physicians who would not find its perusal highly interesting and instruc-

tive. As it is not our object to review the main work, we cannot at present enter at length into a consideration of its merits.

But one more remark on this part of the subject, because it will enable the reader to form a better idea of the author of the supplement. Richter was perhaps too much attached to the doctrines of *STOLL*, and was, as is well-known, severely censured by many of his contemporaries for this inclination of his mind. Now, although his son endeavours, (in the preface,) to defend him, by showing that his partiality in this respect was by no means as great as was generally supposed; yet it seems to us that the consequences of these doctrines appear pretty clearly in the pages of the work just referred to. Our author, according to his own statement, prosecuted his medical studies under the eyes of his father, and in fact derived his earliest information immediately from him. It is, therefore, not difficult to discover how he may have imbibed a fondness for similar views. The facilities which a parent is able to afford his children are certainly great and obvious; but it may be doubted, whether upon the whole it be to the advantage of a man, to have a father who is great in the same science which he cultivates. Every one of course will be ready to excuse him, when placed in such relations, if he should occasionally cling too tenaciously to favourite opinions. An influence, not in every respect salutary, seems to have been thus exercised upon the youthful mind of our author, and this must be borne in mind in judging of many of the criticisms contained in the supplement. We do not wish to say that he holds throughout the unchanged opinions of his father, for this would be impossible in the case of a man who has endeavoured to advance with his science; but it is very clear that he has not been able entirely to efface from his mind impressions received years ago, impressions, which are nevertheless not at all in accordance with the spirit of modern medicine. But to proceed to the principal object of our inquiry.

When the publication of Richter's *Special Therapeutics* was completed, our author, with a view of rendering the work as complete a system of practical medicine as possible, undertook to furnish, in the form of supplementary volumes, an account of the principal acquisitions which the healing art has made since the period of his father's death. Of this supplement two volumes have appeared. The first embraces general outlines of the principal new systems of medicine, which have of late years attracted notice; some new views on the infantile organism; and an account of the most important new remedies which have been added to the *materia medica* within this period. In the second volume we are presented with some general remarks on the cultivation of pathological anatomy, since the commencement of

the present century. Next follows observations on fever in general, on nervous fever in particular, and on delirium tremens. In the third place we have an account of the recent researches in auscultation and percussion; and the remainder of the volume, in fact by far the greater part of it—(576 pages)—is occupied with the late discoveries relative to the diseases of the chest. Several more volumes will probably be required to complete the plan, by delivering the history of such affections as are not included in the second. In the following observations we shall confine ourselves to the first volume, our limits not permitting us to take any further notice of the second.

It would be entirely impossible to attempt a regular analytical review of a work like the one before us. In order to do this it would almost be necessary to translate the whole from the original, inasmuch as it is itself an analysis of a very large number of other works, and is written in a remarkably concise and almost aphoristic style. The best way to give to our readers an idea of the manner in which the different subjects are treated, will be to present to them, in as condensed a form as possible, the principal contents of one chapter. We shall then merely add a few general remarks on the remainder of the work, particularly on the delineations of the latest systems of medicine, and a list of the principal remedies which are treated of. The chapter which we have selected for the first purpose is that on croton oil, and we have chosen this, not because it is superior to the others, for we can discover no particular difference in this respect between it and any of the rest, but simply because it is one of the shortest, and will therefore not occupy much of our space; while, at the same time, it is quite sufficient to show the manner in which all are executed.

The seeds of the croton-tiglum from which this oil is obtained, were formerly used as cathartics, but fell into neglect on account of the vomiting and other drastic effects which frequently followed their exhibition. Many years ago, HAHNEMANN proposed the expressed oil mixed with oil of almonds, in small doses, as a substitute for castor oil, which it appears is sold at a very high price in Germany, and is frequently obtained in an adulterated state in that country. His proposal however attracted no attention. More recently several British physicians have recommended this oil, and prescribed it with great advantage. SCHORT first brought it from Madras to England, obtained a patent for its sale, and vended it in small vials, each containing one drachm. It is a very powerful purgative, one-half of a drop sometimes operating repeatedly, and without pain or inconvenience. If however other cathartics have been ineffectually tried, as much as two drops may be administered, and then its action invariably follows. For the most part it quickly produces a rum-

bling sensation in the bowels, which continues during the whole of its operation; and in less than thirty minutes copious watery evacuations take place. It rarely produces griping, and still less frequently nausea, and it is said to be the promptest and safest of all the purgative medicines with which we are acquainted. One of its greatest advantages is the minuteness of the dose. It is applicable to all cases in which a speedy action on the bowels is demanded. Thus it may be prescribed in obstinate obstructions of the liver, in dropsy, jaundice, bilious fevers, in excessive plethora, in cases of an inordinate disposition to the secretion of fat, in determination of blood to the head, and in such cases of apoplectic coma as require purgation. By rubbing one or two drops of the oil upon the tongue, even the tic doloureux is alleged to have been cured, or at least mitigated. It may be conveniently exhibited in the form of pills, or by rubbing it with sugar and diffusing it in peppermint-water. Several Italian practitioners have likewise extolled the safe and mild operation of this remedy. According to experiments instituted at Berlin, one drop is capable of bringing away from twelve to eighteen stools, and only the eighth part of a drop can be prescribed with safety, which small quantity is quite sufficient to produce a gentle laxative effect. Two grain pills, made of thirty grains of the watery extract of jalap and three drops of croton oil were successfully employed in obstinate obstructions of the abdominal viscera, unattended by inflammation, particularly in ascites. The author himself has prescribed the croton oil in a number of cases, and extols it principally as a remedy in dropsy. He directed, according to circumstances, two, four or six drops to be rubbed with two drachms of sugar, the whole to be divided into eight parts, and one of these to be taken every two or three hours, until the desired effect was produced. In this way he succeeded in two cases in very rapidly evacuating the water of an ascites and anasarca. He regards this oil as one of the very best hydragogues in our profession, but derives its utility in dropsical effusions not only from the copious serous evacuations which it produces, but also from its simultaneous action on the kidneys and skin, the secretion of both of which organs it greatly promotes. He however conceives that in those cases of dropsy which partake of the inflammatory character, it should not be employed. Yet the English physicians assert that they have prescribed it with advantage in bilious fevers and abdominal inflammations. In cases of children SCHNEIDER has obtained from frictions with the diluted oil the same results which follow its internal administration. These frictions are instituted on the surface of the abdomen, and are parti-

cularly eligible for those children to whom medicines cannot easily be given by the mouth. Sometimes worms may be expelled in this way. The same mode of application will succeed in the adult, if the quantity be increased, and it may be usually resorted to in certain cases of constipation. TAVERNIER was not successful in procuring purgation in this way, but asserts that a pustular eruption is thus produced, which extends further than the application of the oil. He therefore proposes this method for the purpose of exciting a cutaneous irritation. POCCHINOTTI employed croton oil for the expulsion of tape-worm. After a preparatory diet of three days, he administered one drop in a cup of broth, and repeated the same dose on the following day. The symptoms however returned after the expiration of a month, so that it became necessary to resume the use of the remedy. It was now given on alternate days, and effected a perfect cure. One drop of croton oil mixed with one ounce of poppy oil affords a preparation very similar to castor oil, and may be given in the same doses. It has been tried in a number of cases in the Polyclinic Institute at Berlin. The activity of croton oil is said to be impaired by mixture with the etherial oils. It is also given in the form of mixture or in lozenges. SEILER prepares the latter, by adding sugar and a little gum Arabic, each lozenge containing a quarter of a grain of the oil. One of these may be taken every two hours until the desired effect is produced. Both are very eligible modes of exhibition, because in powder or mixture it is apt to excite a very disagreeable sensation in the throat. NIMO mixed twelve drops of the oil and half an ounce of alcohol with syrup, mucilage and water, administered the whole at one dose, and ordered milk to be drank after it. This potion operated very copiously, but produced no drastic effects. CAVENTOU prepared a soap of croton oil, by triturating two parts of the oil with one of soap-boiled ley. This was employed by BALLY in two grain doses, either dissolved in water, or made up into pills. The effect did not differ from that of the simple oil. Another soap, made by combining the oil with soda, is proposed by MORSON of London. The dose is from one to three grains. These preparations afford this advantage, that the dose can be very accurately fixed. A tincture of the seeds of the croton tiglium is recommended by POPE. It is made by digesting for six days, two ounces of the seeds, carefully peeled, in one ounce of alcohol, and then filtering. The smallest dose for an adult is twenty drops. This tincture is represented as greatly preferable to the oil, because the outer covering of the seeds, which is said to contain acrid and drastic ingredients, is previously removed. We are told

that it acts much more gently, and yet with sufficient certainty and effect. Quite recently CONWELL has minutely examined the history, chemical relations, medical properties and modes of exhibition of the croton oil. According to his own statement, he was the first who introduced the article into France and England. He places its superiority not only in its very prompt and certain action, but also in the circumstance that it affects in the same manner every portion of the intestinal canal, while other purgatives are confined in their operation to a particular part of the bowels. This being the case, he thinks himself justified in maintaining, that this substance is absorbed into the circulation, and does not begin to produce its characteristic effects, before it has been in this manner conveyed to the mucous surface of the intestines. It also seems to him to operate through the intervention of the nervous system, inasmuch as the secretions are augmented and the peristaltic motion of the bowels increased by its employment. These opinions derive further support from the observations which have been made on other modes of application. Thus it is capable of exciting purgation when rubbed upon the abdomen, applied to the tongue, or injected into the veins, and even by mere long-continued smelling. He considers it the most valuable of the hydragogue cathartics employed in dropsy, and thinks it well adapted to a variety of other cases, particularly to trismus and tetanus, hydrophobia, mania, apoplexy, and in general to all those cases, in which the nervous system has lost its influence over the movements of deglutition, when cathartics are indicated in them. It may moreover be easily given to children, when they refuse to take more bulky articles. Among the different modes of exhibition he prefers that in which it is given in alcoholic solution, because the dose can be most accurately measured in this way. BRANDES has discovered in the seeds of the croton tiglum a new alkaloid and an acid, the latter of which produces terrible effects upon the system, and is the principle on which their purgative quality probably depends.

This may serve as a specimen of the manner in which Dr. Richter gives us an account of the researches of our cotemporaries relative to the new remedies which have lately been introduced into the *materia medica*. By comparison with the original, it will be found to embrace the most important observations contained in the chapter referred to. Others, possessing less interest, we have omitted. These remarks on croton oil are accompanied by numerous references to the works from which the author has compiled. We have, however, purposely not introduced them in this place. Many readers would probably be better pleased, if Richter had brought together, into a regular sci-

tific description, all the facts relating to a given article, which he could gather from the various works at his disposal; but it was not his design to write a systematic treatise. The work is to be regarded merely as a collection of single statements, or of analyses of different works, supplementary to another, and intended to complete what is defective in this. This being the case, we cannot look for a scientific arrangement; nor can we expect that repetition should always be avoided. The method here adopted has, however, obvious advantages; for we are thus not confined to a knowledge of the opinions of one author, but have an opportunity to compare the statements of a great number of writers.

We shall now proceed to take a very rapid general view of the different parts of the work. It opens with a sketch of the principal attempts which have been made since the commencement of the present century to establish complete systems of medicine. Of these there are three which will engage the attention of the inquirer; the system of BROUSSAIS, or the physiological doctrine, in France; that of RASORI and his followers, or the doctrine of contra-stimulus, in Italy; and the system of HAHNEMANN, known by the appellation of homœopathy, and prevalent chiefly in Germany. Each of these is represented by its inventor as the only rational method which has ever been proposed; each of them is said to afford the only available precepts; and to be almost infallible at the bed-side of the sick; and yet there could not be imagined any three things more discrepant than the practice of these sects. In the same disease the first resorts to copious and repeated abstractions of blood; the second administers tartarized antimony in almost incredible doses, and the third is willing to rely upon the octillionth part of a drop of the juice of belladonna; and yet a prompt and perfect cure ensues.

To his observations on these recent systems of medicine, Richter premises a few remarks upon the application of the philosophy of Schelling to our science. Although there are probably very few among our readers who have the slightest idea of the nature of this philosophy, inasmuch as it is, as far as we know, entirely confined to Germany; yet we do not think it expedient to consume any time in attempting to present a sketch of it, because it really appears to us to be worse than useless. It was always the practice of physicians to introduce into their science the philosophy of the schools. No system of consequence was ever invented, of which such an application was not made. Now we will not go so far as to maintain, that medicine never derived the least advantage from attempts of this kind. The philosophy of DESCARTES was undoubtedly instrumental in the

propagation of HARVEY's great discovery, and was one of the causes which inflicted the last and fatal blow on Galenism; and that of LEIBNITZ was the basis upon which were built the improved views of FREDERICK HOFFMAN: but the present is not the time for such efforts. They are singularly at variance with the spirit of the age, and the profession in France, England, and this country, is fully convinced that the science can never be regenerated in this way. It is greatly to be lamented, that there are still so many among our German brethren who are not sensible of this, and who continue to waste their precious time in so fruitless an enterprise. By this system in particular, the easiest things are involved in difficulties, and gratuitous assumptions without end are made to supply the place of observation and experience. But what to us is most surprising is the fact, that so eminently practical a man as our author, really and in serious earnest attaches considerable importance to these doctrines, and even goes so far as to assert that the superiority of German medical theory, which he boldly assumes, is mainly dependent upon their application; and when he further informs us, that even his illustrious father was conscious of advantages to be derived from them, we are almost at a loss how to interpret his expressions. In fact this part of the work, we are confident, would be interesting to very few of our readers, and we are almost tempted to say, would scarcely be intelligible to the majority of them. The influence, however, which these notions have acquired over the mind of our author, must be borne in mind in judging of several criticisms which occur in this volume.

Next follows an account of the celebrated doctrines of M. BROUSSAIS. Of all the systems which we shall consider, this has obtained the largest number of supporters, and has exercised the most powerful influence upon practical medicine; an influence, indeed, which is not confined to the limited circle of its devoted advocates, but which is obvious in the practice of all classes of physicians in France, and has extended, though in a less degree, even to several of the neighbouring countries. Thus it is stated, though the account is probably somewhat exaggerated, that in consequence of the diffusion of the therapeutical precepts which follow from these doctrines, the employment of leeches has of late years become so general at Paris, that from three to six millions of these animals are annually required for the use of the hospitals in that capital, and that in the Hôtel-Dieu alone, no less than four hundred are daily applied in every ward. The delineation of the principles of physiological medicine, as contained in the work before us, is clear and satisfactory, and is accom-

panied by a list of the principal works which have been written upon the subject, both by adherents and adversaries. It cannot of course be expected that Richter would be willing to give his assent to every thing which is taught by this school. He has accordingly annexed a number of critical observations, in which he endeavours to point out the defects of the system. Many of these are highly deserving of our approbation, and might be read with profit by some of our American physicians; yet the peculiar turn of the author's mind, his partiality for certain antiquated opinions, and perhaps also his leaning towards the philosophy of Schelling, are discernible in several of them. To us one of his propositions appears a little singular. He asserts that peritonitis is unattended by pain, because the peritoneum is very sparingly supplied with nerves. We do not know whether such an opinion generally prevails in Germany, or whether it is peculiar to himself. In this country, however, peritonitis is considered a painful, and in the majority of cases a very painful affection. A few solitary instances, such as are reported by ANDRAL, in which no real pain was felt during life, and yet appearances of inflammation were detected after death, are not calculated as yet to subvert the general rule. The success which the Broussain practice has hitherto met with, is attributed by Richter to the prevalent inflammatory constitution, and it will not, in his opinion, be able to maintain itself after this has ceased to exist.

The Italian doctrine of contra-stimulus occupies the third division of this part of the work. We do not hesitate to say that the view here presented is by far the best which we have hitherto met with, being in every respect much more complete and satisfactory than the sketches published a few years ago in the British and American journals. It is not a very easy matter to give an accurate account of this system, for RASORI, its founder, has never communicated his ideas to the public in a systematic form, and BRERA, BORDA, and TOMMASINI, who are among his principal followers, are sometimes at variance with each other on points of vital importance. Our author, however, has succeeded in delivering, in a very interesting manner, a general outline of these doctrines, and has as usual added the titles of the most important works which have appeared in relation to them. He very clearly points out, in the course of his essay, the numerous discrepancies and contradictions into which their advocates have fallen, and demonstrates the untenable character of the fundamental position upon which they are founded. At the same time he is ready to admit, that useful inferences may be drawn from the peculiar manner in which these physicians administered their remedies.

It must undoubtedly be considered as proved by them, that the stomach is capable of bearing much larger doses of several articles, than we have hitherto been accustomed to believe; and although, upon the whole, their example can hardly be deemed worthy of imitation, yet cases may occur in which the practitioner might profit by a knowledge of the facts disclosed by them. As a specimen of the uncertainty which still prevails, and which doubtless will always continue to prevail, in the details of the pathology and therapeutics of this system, we will only mention the circumstance, that although the two diatheses which are assumed, are diametrically opposite in their character, it cannot in many instances be determined to which of the two a given affection belongs. Thus the same disease is attributed by one author to the diathesis of stimulus, and by another to the diathesis of contra-stimulus. The same is the case with the remedies. One writer places a given article among the stimuli, and another among the contra-stimuli; nay the same drug has in several instances already been repeatedly transferred from one division to the other.

The last general system is the homœopathic, the principles of which are fully explained, being preceded by a very interesting historical sketch of its rise and progress. This is a subject which has attracted but little attention in the United States, but it is not unreasonable to suppose, that the time may come, when our physicians will be called upon to refute a set of opinions, eminently calculated to captivate large portions of the community. Those of our readers who are desirous to make themselves acquainted with this singular concatenation of misconstrued facts, may consult one of the pamphlets which have lately been published both in England and this country by the disciples of Hahnemann, and an abundance of arguments subversive of the entire fabric, will readily suggest themselves to their minds.

After this review of the principal new systems which now divide so large a portion of the medical world, follows a dissertation on the infantile organism, and the principles which should guide the physician in the treatment of the diseases of children. It fills thirty-eight pages, and contains many interesting statements and useful reflections.

The remainder of the volume, (from page 160 to 646,) is occupied with an account of the numerous new remedies which have of late years come into use, and of several others, which, though formerly much employed, had fallen into neglect, but have recently again been introduced to the notice of the profession. In a practical point

of view this is the most important part of the whole, and it has evidently been compiled with great care. It must be observed, that the object of the work is entirely practical. Hence the botanical, pharmacological, and chemical relations of the different articles are but slightly noticed, while their therapeutical effects are fully and circumstantially detailed. We have already given a specimen of the manner in which this part of the work is executed, and shall now merely subjoin a list of the most important medicines which are passed in view. They are radix rhatany, arrow-root, piper cubeba, colchicum autumnale, secale cornutum, lactucarium, iodine, croton oil, pyroligneous acid, prussic acid, the salts of cinchona, gold, the carbonate of iron, the nitro-muriatic bath, acupuncture, moxa. Besides these, there is a great variety of other substances from all the three kingdoms of nature, which being of less importance, we do not enumerate.

In conclusion, it remains for us to state in "general terms, what impression the reading of this first volume of Richter's work has left upon our mind; and here we unhesitatingly assert, that we have seen very few medical works from the perusal of which we have derived so much instruction. It would be difficult to point out a single subject considered in its pages, on which we do not receive ample and satisfactory information. The only blemishes of any consequence which we can discover, are some of the theoretical opinions implied in several of the critical remarks which occur in different parts of the volume. These cannot, however, in any considerable degree, affect the utility of the whole, and if we have dwelt upon them in the course of this review, it was only because we deemed it our duty to notice also those things from which we are obliged to dissent. The work, nevertheless, remains one of high value, and deserves to be attentively studied by those of our physicians who are conversant with the German language. Should our author in a few instances have overlooked the contributions of American writers, this will not create surprise, when we recollect that he resides in a remote city of the Prussian dominions, where he has access to no libraries, and is therefore confined to his own collection of books.

E. R.